

Practitioner's Docket No. U 015415-0

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00140

PATENT TRADEMARK OFFICE

CHAPTER II

**TRANSMITTAL LETTER  
TO THE UNITED STATES ELECTED OFFICE (EO/US)  
(ENTRY INTO U.S. NATIONAL PHASE UNDER CHAPTER II)**

INTERNATIONAL APPLICATION NO. PCT/FI03/00301	INTERNATIONAL FILING DATE 16 APRIL 2003	PRIORITY DATE CLAIMED 19 APRIL 2002
TITLE OF INVENTION SPRAYING HEAD		
APPLICANT(S) 1. MAHLANEN, Timo 2. RÖNNBERG, Jan 3. HONKANEN, Aimo 4. SUNDHOLM, Göran 5. METZGER, Harry 6. TUOMISAARI, Maarit		

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**INFORMATION DISCLOSURE STATEMENT**

We draw the attention of the Examiner to the attached English-language version of an

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I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date OCTOBER 19, 2004 in an envelope as Express Mail Post Office to Addressee," mailing Label Number EV 481671013 US, addressed to the: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

GERALDINE MARTI

(type or print name of person mailing paper)

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International-type Search Report from a foreign office in respect of counterpart International Application No. PCT/FI03/00301 that indicates the degree of relevance found by the foreign office. The Search Report makes consideration of any non-English art required. MPEP 609.

Form PTO-1449 is also attached with reference copy.

Respectfully submitted,



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REG.NO.25858(212)708-1930

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00301

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: F02M 25/028, B05B 1/14

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: F02M, B05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003000773 A1 (W. ENGLER ET AL), 2 January 2003 (02.01.03), figures 1-5, abstract --	1-10
A	US 4757787 A (A. RISITANO ET AL), 19 July 1988 (19.07.88), figures 1,2,5, abstract --	
A	US 4406255 A (T.P. GOODMAN), 27 Sept 1983 (27.09.83), figures 1-6, abstract --	
A	US 4051815 A (L.E. COBERLEY), 4 October 1977 (04.10.77), figures 1-12, abstract --	

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

8 July 2003

Date of mailing of the international search report

08 -07- 2003

Name and mailing address of the ISA/

Swedish Patent Office  
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**INTERNATIONAL SEARCH REPORT**  
 Information on patent family members

29/06/03

International application No.

PCT/FI 03/00301

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
US	2003000773	A1	02/01/03	DE	10002414 A	09/08/01
				EP	1248927 A	16/10/02
				WO	0153741 A	26/07/01
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US	4757787	A	19/07/88	AT	56075 T	15/09/90
				AU	4547085 A	01/07/86
				CA	1297360 A,C	17/03/92
				DE	3579456 D	00/00/00
				DE	8590173 U	09/07/87
				EP	0204707 A,B	17/12/86
				SE	0204707 T3	
				ES	549637 A	16/11/87
				ES	8800741 A	01/02/88
				IT	8506604 D	00/00/00
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				IT	1221126 B	21/06/90
				IT	8406628 D	00/00/00
				JP	62501093 T	30/04/87
				ZA	8508996 A	30/07/86
				CH	409096 A	15/03/66
				DE	1438949 A	21/11/68
				FR	1413835 A	08/10/65
				GB	1078413 A	09/08/67
				IT	1221127 B	21/06/90
				IT	8406632 D	00/00/00
				US	3284596 A	08/11/66
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US	4406255	A	27/09/83	NONE		
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US	4051815	A	04/10/77	NONE		
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US	3911871	A	14/10/75	NONE		
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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00301

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3911871 A (E.A. WILLIAMS ET AL), 14 October 1975 (14.10.75), figures 1-4, abstract  --	
A	PATENT ABSTRACT OF JAPAN vol. 1997, no. 04, 30 April 1997 (1997-04-30) & JP 08 338317 A (READ KOGYO KK), 24 December 1996 (1996-12-24) abstract  -- -----	

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

FORM PTO-1449		U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <b>U 015415-0</b> SERIAL NO. <b>10/511939</b>		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)				APPLICANT		
				TIMO MAHLANEN, et al		
				FILING DATE	GROUP	
U.S. PATENT DOCUMENTS						
EXAMINER INITIALS	REFERENCE DESIGNATION	DOCUMENT NUMBER	DATE	NAME	FILING DATE IF APPROPRIATE	
	AA	2003000773 A1	JAN. 2, 2003	W. ENGLER, et al		
	AB	4757787	JULY 19, 1988	A. RISITANO, et al		
	AC	4406255	SEPT. 27, 1983	T.P. GOODMAN		
	AD	4051815 A	OCT. 4, 1977	L.E. COBERLEY		
	AE	3911871 A	OCT. 14, 1975	E.A. WILLIAMS, et al		
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
FOREIGN PATENT DOCUMENTS						
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AL	08-338317	DEC. 24, 1996	JAPAN		
	AM					
	AN					
	AO					
	AP					
OTHER ART (Including Author, Title, Date, Pertinent Dates, Etc.)						
	AR	PATENT ABSTRACT OF JAPAN 08-338317 PUBLISHED DECEMBER 24, 1996				
	AS					
	AT					
EXAMINER				DATE CONSIDERED		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						